

defined in the Food Protection Act of 1996 (Section 303, Pub. L. 104-170, 110 Stat. 1512). This states in part that Integrated Pest Management is a sustainable approach to managing pests by combining biological, cultural, physical, and chemical tools in a way that minimizes economic, health, and environmental risks. The IPM program emphasizes three fundamental elements:

(1) *Prevention.* IPM is a preventive maintenance process that seeks to identify and eliminate potential pest access, shelter, and nourishment. It also continually monitors for pests themselves, so that small infestations do not become large ones;

(2) *Least-toxic methods.* IPM aims to minimize both pesticide use and risk through alternate control techniques and by favoring compounds, formulations, and application methods that present the lowest potential hazard to humans and the environment; and

(3) *Systems approach.* The IPM pest control contract must be effectively coordinated with all other relevant programs that operate in and around a building, including plans and procedures involving design and construction, repairs and alterations, cleaning, waste management, food service, and other activities.

(n) For new records storage facilities only, the additional requirements in this paragraph (n) must be met:

(1) Do not install mechanical equipment, excluding material handling and conveyance equipment that have operating thermal breakers on the motor, containing motors rated in excess of 1 HP within records storage areas (either floor mounted or suspended from roof support structures).

(2) Do not install high-voltage electrical distribution equipment (*i.e.*, 13.2kv or higher switchgear and transformers) within records storage areas (either floor mounted or suspended from roof support structures).

(3) A redundant source of primary electric service such as a second primary service feeder should be provided to ensure continuous, dependable service to the facility especially to the HVAC systems, fire alarm and fire protection systems. Manual switching between sources of service is acceptable.

(4) A facility storing permanent records must be kept under positive air pressure, especially in the area of the loading dock. In addition, to prevent fumes from vehicle exhausts from entering the facility, air intake louvers must not be located in the area of the loading dock, adjacent to parking areas, or in any location where a vehicle engine may be running for any period of time. Loading docks must have an air supply and exhaust system that is separate from the remainder of the facility.

§ 1234.12 What are the fire safety requirements that apply to records storage facilities?

(a) The fire detection and protection systems must be designed or reviewed by a licensed fire protection engineer. If the system was not designed by a licensed fire protection engineer, the review requirement is met by furnishing a report under the seal of a licensed fire protection engineer that describes the design intent of the fire detection and suppression system, detailing the characteristics of the system, and describing the specific measures beyond the minimum features required by code that have been incorporated to minimize loss. The report should make specific reference to appropriate industry standards used in the design, such as those issued by the National Fire Protection Association, and any testing or modeling or other sources used in the design.

(b) All interior walls separating records storage areas from each other and from other storage areas in the building must be at least three-hour fire barrier walls. A records storage facility may not store more than 250,000 cubic feet total of Federal records in a single records storage area. When Federal records are combined with other records in a single records storage area, only the Federal records will apply toward this limitation.

(c) Fire barrier walls that meet the following specifications must be provided:

(1) For existing records storage facilities, at least one-hour-rated fire barrier walls must be provided between the records storage areas and other auxiliary spaces.

(2) For new records storage facilities, two-hour-rated fire barrier walls must be provided between the records storage areas and other auxiliary spaces. One exterior wall of each stack area must be designed with a maximum fire resistive rating of one hour, or, if rated more than one hour, there must be at least one knock-out panel in one exterior wall of each stack area.

(d) Penetrations in the walls must not reduce the specified fire resistance ratings. The fire resistance ratings of structural elements and construction assemblies must be in accordance with ASTM E 119-98 (incorporated by reference, see § 1234.3).

(e) The fire resistive rating of the roof must be a minimum of ½ hour for all records storage facilities, or must be protected by an automatic sprinkler system designed, installed, and maintained in accordance with NFPA 13 (incorporated by reference, see § 1234.3).

(f) Openings in fire barrier walls separating records storage areas must be avoided to the greatest extent possible. If openings are necessary, they must be protected by self-closing or automatic Class A fire doors, or equivalent doors that maintain the same rating as the wall.

(g) Roof support structures that cross or penetrate fire barrier walls must be cut and supported independently on each side of the fire barrier wall.

(h) If fire barrier walls are erected with expansion joints, the joints must be protected to their full height.

(i) Building columns in the records storage areas must be at least 1-hour fire resistant or protected in accordance with NFPA 13 (incorporated by reference, see § 1234.3).

(j) Automatic roof vents for routine ventilation purposes must not be designed into new records storage facilities. Automatic roof vents, designed solely to vent in the case of a fire, with a temperature rating at least twice that of the sprinkler heads are acceptable.

(k) Where lightweight steel roof or floor supporting members (e.g., bar joists having top chords with angles 2 by 12 inches or smaller, 1/4-inch thick or smaller, and 13/16-inch or smaller Web diameters) are present, they must be protected either by applying a 10-

minute fire resistive coating to the top chords of the joists, or by retrofitting the sprinkler system with large drop sprinkler heads. If a fire resistive coating is applied, it must be a product that will not release (off gas) harmful fumes into the facility. If fire resistive coating is subject to air erosion or flaking, it must be fully enclosed in a drywall containment constructed of metal studs with fire retardant drywall. Retrofitting may require modifications to the piping system to ensure that adequate water capacity and pressure are provided in the areas to be protected with these large drop sprinkler heads.

(l) Open flame (oil or gas) unit heaters or equipment, if used in records storage areas, must be installed or used in the records storage area in accordance with NFPA 54 (incorporated by reference, see § 1234.3), and the IAPMO/ANSI UMC 1, Uniform Mechanical Code (incorporated by reference, see § 1234.3).

(m) For existing records storage facilities, boiler rooms or rooms containing equipment operating with a fuel supply (such as generator rooms) must be separated from records storage areas by 2-hour-rated fire barrier walls with no openings directly from these rooms to the records storage areas. Such areas must be vented directly to the outside to a location where fumes will not be drawn back into the facility.

(n) For new records storage facilities, boiler rooms or rooms containing equipment operating with a fuel supply (such as generator rooms) must be separated from records storage areas by 4-hour-rated fire barrier walls with no openings directly from these rooms to the records storage areas. Such areas must be vented directly to the outside to a location where fumes will not be drawn back into the facility.

(o) For new records storage facilities, fuel supply lines must not be installed in areas containing records and must be separated from such areas with 4-hour rated construction assemblies.

(p) Equipment rows running perpendicular to the wall must comply with NFPA 101 (incorporated by reference, see § 1234.3), with respect to egress requirements.

(q) No oil-type electrical transformers, regardless of size, except thermally protected devices included in fluorescent light ballasts, may be installed in the records storage areas. All electrical wiring must be in metal conduit, except that armored cable may be used where flexible wiring connections to light fixtures are required. Battery charging areas for electric forklifts must be separated from records storage areas with at least a 2-hour rated fire barrier wall.

(r) Hazardous materials, including records on cellulose nitrate film, must not be stored in records storage areas. Nitrate motion picture film and nitrate sheet film may be stored in separate areas that meet the requirements of the appropriate NFPA standards, NFPA 40-1997 (incorporated by reference, see § 1234.3), or NFPA 42 (incorporated by reference, see § 1234.3).

(s) All record storage and adjoining areas must be protected by a professionally-designed fire-safety detection and suppression system that is designed to limit the maximum anticipated loss in any single fire event involving a single ignition and no more than 8 ounces of accelerant to a maximum of 300 cubic feet of records destroyed by fire. Section 1234.32 specifies how to document compliance with this requirement.

§ 1234.14 What are the requirements for environmental controls for records storage facilities?

(a) *Paper-based temporary records.* Paper-based temporary records must be stored under environmental conditions that prevent the active growth of mold. Exposure to moisture through leaks or condensation, relative humidities in excess of 70%, extremes of heat combined with relative humidity in excess of 55%, and poor air circulation during periods of elevated heat and relative humidity are all factors that contribute to mold growth.

(b) *Nontextual temporary records.* Nontextual temporary records, including microforms and audiovisual and electronic records, must be stored in records storage space that is designed to preserve them for their full retention period. New records storage facilities that store nontextual temporary

records must meet the requirements in this paragraph (b) beginning on September 28, 2005. Existing records storage facilities that store nontextual temporary records must meet the requirements in this paragraph (b) no later than October 1, 2009. At a minimum, nontextual temporary records must be stored in records storage space that meets the requirements for medium term storage set by the appropriate standard in this paragraph (b). In general, medium term conditions as defined by these standards are those that will ensure the preservation of the materials for at least 10 years with little information degradation or loss. Records may continue to be usable for longer than 10 years when stored under these conditions, but with an increasing risk of information loss or degradation with longer times. If temporary records require retention longer than 10 years, better storage conditions (cooler and drier) than those specified for medium term storage will be needed to maintain the usability of these records. The applicable standards are:

(1) ANSI/PIMA IT9.11 (incorporated by reference, see § 1234.3);

(2) ANSI/NAPM IT9.23 (incorporated by reference, see § 1234.3);

(3) ANSI/PIMA IT9.25 (incorporated by reference, see § 1234.3);

(4) ANSI/NAPM IT9.20 (incorporated by reference, see § 1234.3); and/or

(5) ANSI/NAPM IT9.18 (incorporated by reference, see § 1234.3).

(c) *Paper-based permanent, unscheduled and sample/select records.* Paper-based permanent, unscheduled, and sample/select records must be stored in records storage space that provides 24 hour/365 days per year air conditioning (temperature, humidity, and air exchange) equivalent to that required for office space. See ANSI/ASHRAE Standard 55 (incorporated by reference, see § 1234.3), and ASHRAE Standard 62 (incorporated by reference, see § 1234.3), for specific requirements. New records storage facilities that store paper-based permanent, unscheduled, and/or sample/select records must meet the requirement in this paragraph (c) beginning on September 28, 2005. Existing storage facilities that store paper-based permanent, unscheduled, and/or sample/select records must meet the